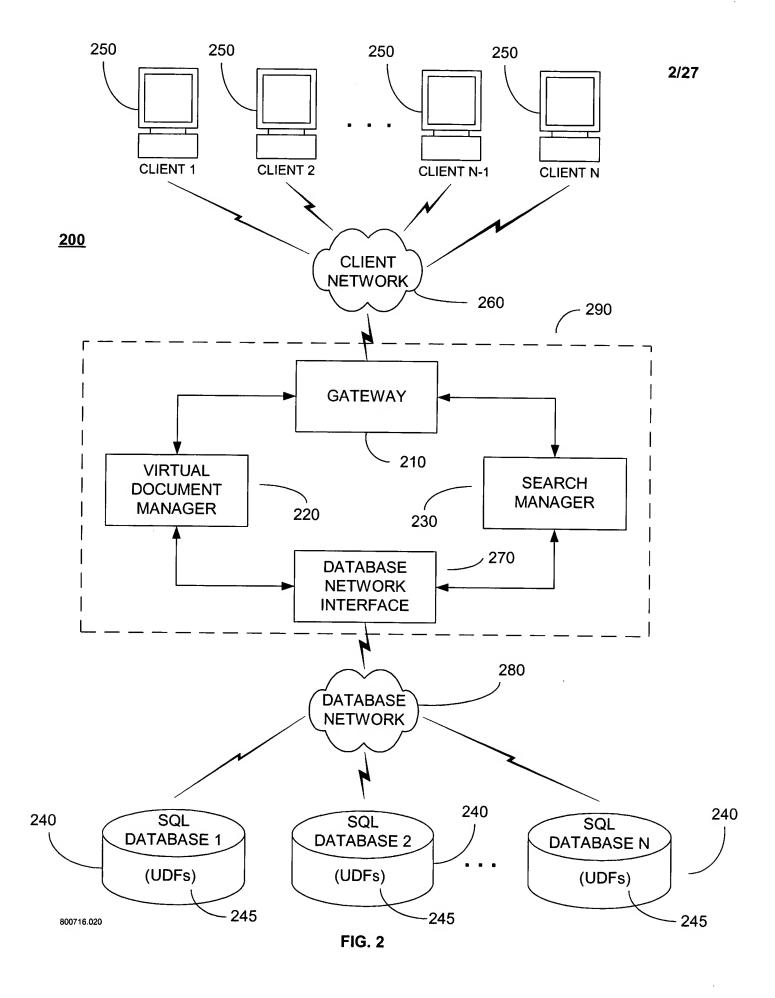


Prior Art

FIG. 1



```
<claim>
    <claimant>
        <name/>
        </claimant>
        <witness>
            <name/>
        </witness>
        </claim>
```

```
<DATASET connection="">
   <EXPRESSION type="table|sql"></EXPRESSION>
   <BIND>
     <DETAIL>
        <NAME></NAME>
        <TYPE></TYPE>
      </DETAIL>
     <MASTER>
        <NAME></NAME>
        <TYPE></TYPE>
     </MASTER>
  </BIND>
  <PATH>
     <FIELD>
        <NAME></NAME>
        <TYPE></TYPE>
     </FIELD>
  </PATH>
  <CHILDDATASET/>
</DATASET>
```

FIG. 4

```
<SCHEMA name="">
     <STRUCTURE/>
     <SEMANTICS/>
     <COMPATIBLE/>
     <MAPPING implementation="">
        <DATASET datasource="">
          <EXPRESSION></EXPRESSION>
           <BIND>
                     <DETAIL>
                           <NAME></NAME>
                           <TYPE></TYPE>
                     </DETAIL>
          </BIND>
          <PATH></PATH>
          <FIELD pkey="true">
                     <NAME></NAME>
                     <TYPE></TYPE>
                     <PATH></PATH>
          </FIELD>
          <CHILDDATASET/>
       </DATASET>
     </MAPPING>
  </SCHEMA>
```

PKEY	NAME_FIRST	NAME_MIDDLE	NAME_LAST
627	BENJAMIN		BENDER
641	BRIAN	K	HOSKINS
1131	BRYAN		DELANCEY
1242	BRIAN		BAILEY
1480	BENJAMIN		STAMM
1674	BRIAN	J	GRUND
1792	BEN	F	NERY
1885	BRIAN		PRUCKER
2895	BRIAN		ABBOTT
3283	BURTON		TOBEY
3303	BRIAN	Н	WALLIS
3538	BNEJAMIN	J	SELLORS
3713	BENJAMIN		MOBLEY
3731	BRIAN	Е	LADD
3782	BRIAN		GODEAUX
3869	BROOKS-HARMON		BLAIR
4007	BRIAN		CLARK

FIG. 6

PKEY	ADDRESS	CITY	STATE
627	13588 VIA FLORA	DELRAY BEACH	FL
641	1901 WESTMORELAND BLVD	PORT ST. LUCIE	FL
1131			
1242	108 ELLERBE RD	ROCKINGHAM	NC
1480	2503 COG HILL LN	LAS VEGAS	NV
1674	10121 ROVEOUT LN	COLUMBIA	MD
1792	4935 PALIN ST	SAN DIEGO	CA
1885	1127 TOLLAND TURNPIKE	MANCHESTER	CT
2895	20 BUTLER PLACE	BROOKLYN	NY
3283	6509 GOLDEN PL	TAMPA	FL
3303	531 HALL CT	HAVRE DE GRACE	MD
3538	10184 CLIFF MILLS RD	MARSHALL	VA
3713	704 HUMINGBIRD	KILLEEN	TX
3731	1089 GLENWOOD STREET	DUNEDIN	FL
3782	4605 S INDEPENDENCE	LITTONTON	CO
3869	1335 WIKIUP DR	SANTA ROSA	CA
4007	820 DIXIE AVE NE	ATLANTA	GA

FIG. 7

PKEY	PKEY NAME_FIRST NAME MII	DLE	NAME LAST	ADDRESS	CITY	STATE
627	BENJAMIN		BENDER	13588 VIA FLORA	DELRAY BFACH	FI
641	BRIAN	K	HOSKINS	1901 WESTMORELAND RIVD	PORT ST. LUCIE	FL
1131	BRYAN		DELANCEY			
1242	BRIAN		BAILEY	108 ELLERBE RD	ROCKINGHAM	NC
1480	BENJAMIN		STAMM	2503 COG HILL LN	LAS VEGAS	N
1674	BRIAN	J	GRUND	10121 ROVEOUT LN	COLUMBIA	S S
1792	BEN	F	NERY	4935 PALIN ST	SAN DIEGO	CA
1885	BRIAN		PRUCKER	1127 TOLLAND	MANCHESTER	CT
				TURNPIKE		
2895	BRIAN		ABBOTT	20 BUTLER PLACE	BROOKLYN	λ
3283	BURTON		TOBEY	6509 GOLDEN PL	TAMPA	FI
3303	BRIAN	Н	WALLIS	531 HALL CT	HAVRE DE	MD
					GRACE	
3538	BNEJAMIN	J	SELLORS	10184 CLIFF MILLS RD	MARSHALL	VA
3713	BENJAMIN		MOBLEY	704 HUMINGBIRD	KILLEEN	XL
3731	BRIAN	Щ	LADD	1089 GLENWOOD	DUNEDIN	FL
				STREET		
3782	BRIAN		GODEAUX	4605 S INDEPENDENCE	LITTONTON	C
3869	BROOKS- HADMON		BLAIR	1335 WIKIUP DR	SANTA ROSA	CA
4007	DDIAN					
4007	BKIAIN		CLARK	820 DIXIE AVE NE	ATLANTA	GA

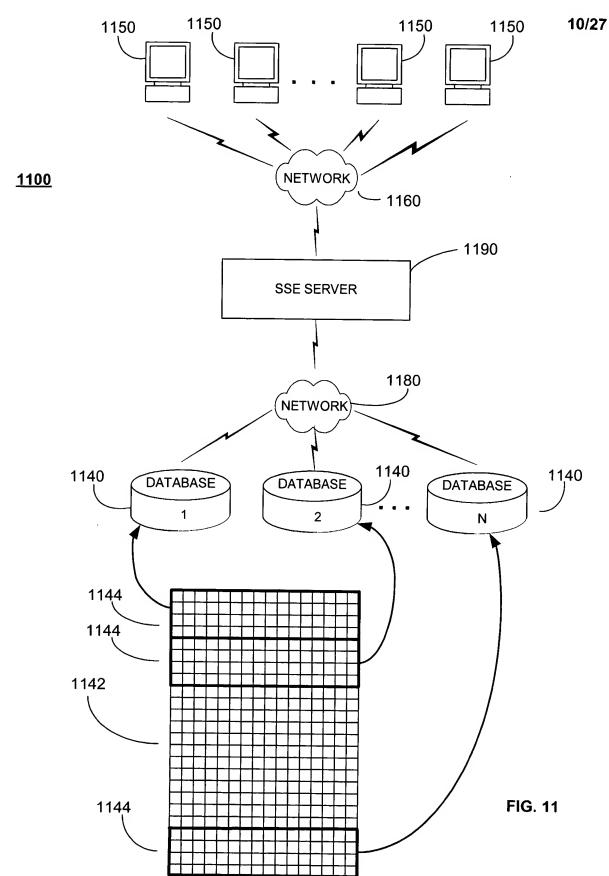
FIG. 8

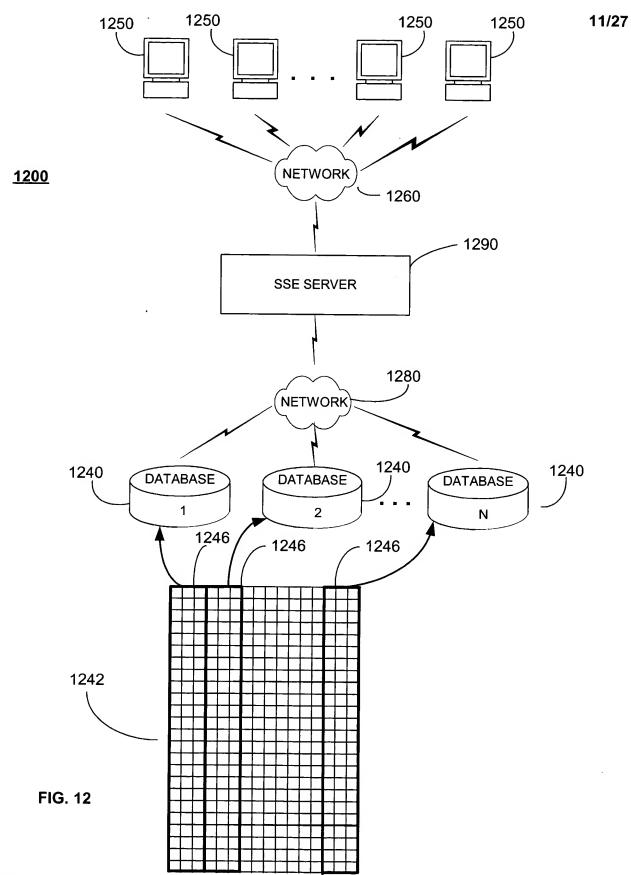
PKEY	NAME_FIRST	NAME_MIDDLE	NAME_LAST
627	benjamin		bender
641	brian	k	hoskins
1131	bryan		delancey
1242	brian		bailey
1480	benjamin		stamm
1674	brian	j	grund
1792	ben	f	nery
1885	brian		prucker
2895	brian		abbott
3283	burton		tobey
3303	brian	h	wallis
3538	bnejamin	j	sellors
3713	benjamin		mobley
3731	brian	e	ladd
3782	brian		godeaux
3869	brooks-harmon		blair
4007	brian		clark

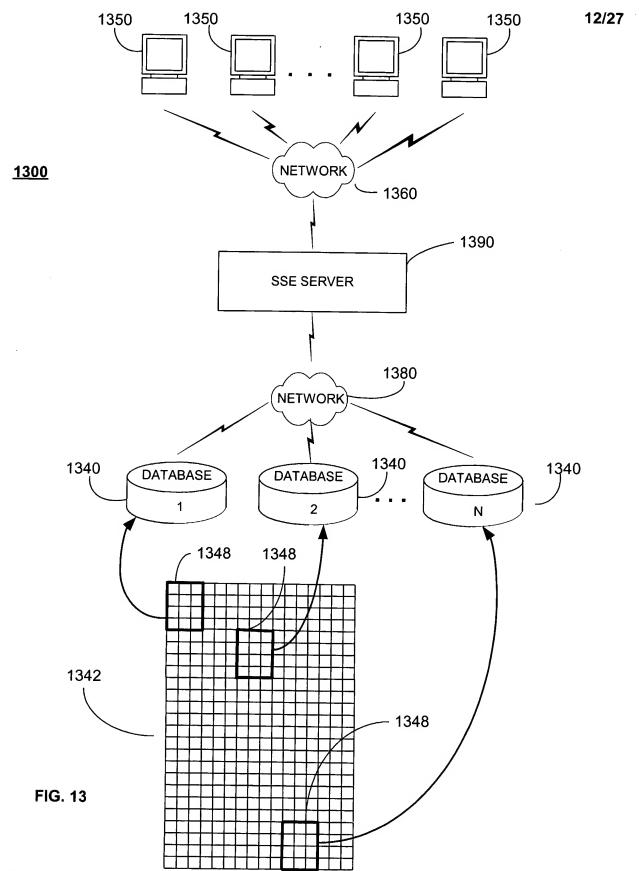
FIG. 9

PKEY	NAME_FIRST
627	0.240740746259689
641	1
1131	0.800000011920929
1242	1
1480	0.240740746259689
1674	1
1792	0.541666686534882
1885	1
2895	1
3283	0.550000011920929
3303	1
3538	0.240740746259689
3713	0.240740746259689
3731	1
3782	1
3869	0.195121943950653
4007	1

FIG. 10







FUNCTION	PURPOSE
NAMEDIFF	Measures name and name parts and understands the difference
	between first and last names and nicknames
SOUNDEX	Measure how close two name "sound"
STRDIFF	Measure how close two strings are using character transpositions and character noise and white space.

FIG. 14

FUNCTION	PURPOSE
STREETDIFF	Measure the closeness of two string which represent street addresses and understands apt. designations along with street type, direction, and abbreviations
CITY	Measures how close two cities are by both using spelling and considering physical distance using suburbs lookups
ZIP	Measures physical distance of two ZIP codes

FIG. 15

PKEY	NAME_FIRST	SCORE 1	NAME_LAST	SCORE 2
627	BENJAMIN	0.653124988079071	BENDER	0.474999994039536
641	BRIAN	1	HOSKINS	0.125
1131	BRYAN	0.949999988079071	DELANCEY	0.474999994039536
1242	BRIAN	1	BAILEY	0.949999988079071
1480	BENJAMIN	0.653124988079071	STAMM	0.157894730567932
1674	BRIAN	1	GRUND	0.00999999977648258
1792	BEN	0.759999990463257	NERY	0.1875
1885	BRIAN	1	PRUCKER	0.00999999977648258
2895	BRIAN	1	ABBOTT	0.260869562625885
3283	BURTON	0.814285695552826	TOBEY	0.416666656732559
3303	BRIAN	1	WALLIS	0.474999994039536
3538	BNEJAMIN	0.653124988079071	SELLORS	0.474999994039536
3713	BENJAMIN	0.653124988079071	MOBLEY	0.6666666686534882
3731	BRIAN	1	LADD	0.210526317358017
3782	BRIAN	1	GODEAUX	0.00999999977648258
3869	BROOKS- HARMON	0.569999992847443	BLAIR	0.855000019073486
4007	BRIAN	1	CLARK	0.474999994039536

PKEY	SCORE 1	SCORE 2	SCORE 3	SCORE 4
627	. 1	0.309523820877075	0.109375	0.102564103901386
641	0.653124988079071	0.15384615957737	0.233333334326744	0.009999999776482
1131	0.653124988079071	0.0925925895571709	0	0
1242	0.653124988079071	0.119047619402409	0.224999994039536	0.111111111938653
1480	1	0.157894730567932	0.157142862677574	0.0892857164144516
1674	0.653124988079071	0.009999999776482	0.144067794084549	0.133333340287209
1792	0.746428549289703	0.458333343267441	0.163934424519539	0.111111111938653
1885	0.653124988079071	0.125	0.197368428111076	0.0909090936183929
2895	0.653124988079071	0.474999994039536	0.161764711141586	0.270833343267441
3283	0.474999994039536	1	0.1076923808723927	0.009999999776482
3303	0.653124988079071	0.009999999776482	0.119402982294559	0.095238097012043
3538	1	0.10416666418314	0.242647051811218	0.009999999776482
3713	1	0.75	0.841666695455811	0.958333313465118
3731	0.653124988079071	0.009999999776482	0.243243247270584	0.275000005960464
3782	0.653124988079071	0.307692319154739	0.383928567171097	0.600000023841858
3869	0.514583349227905	0.138888895511627	0.141666665673256	0.009999999776482
4007	0.653124988079071	0.009999999776482	0.161764711141586	0.269230782985687

FIG. 17

PKEY	NAME_FIRST	NAME_MIDDLE	NAME_LAST
12	JOHNNIE	L	SINKFIELD
15	JOHNNIE	L	SINKFIELD
17	JOHNNIE	L	SINKFIELD
28	JOHNNIE	L	SINKFIELD
33	JEAN	M	BUTLER
147	JOAN		SELEFKY
291	JOHN		SMITH
303	JUNE	R	MORRISON
304	JEANNE		VADALA
358	JOAN		WINESTOCK
372	JOHN		BISSMAN
373	JOHN		BISSMAN
375	JOHN		BISSMAN
395	JOANNE		SONTAG
398	JUNE	С	FRIEDEL
399	JUNE	С	FRIEDEL
407	JOHN		SHIVE

FIG. 18

0.94999988079071 0.949999988079071 0.949999988079071 0.949999988079071 1 0.949999988079071 1 0.949999988079071 1 1 1 0.949999988079071 1 0.949999988079071	PKEY	2	3
0.94999988079071 0.949999988079071 0.949999988079071 1 0.949999988079071 1 0.949999988079071 1 1 1 1 0.949999988079071 1 1 0.94999988079071 1 0.949999988079071	12	0.949999988079071	0.580555558204651
0.94999988079071 0.949999988079071 0.949999988079071 1 0.949999988079071 1 1 1 1 0.94999988079071 1 0.94999988079071 0.949999988079071	15	0.949999988079071	0.580555558204651
0.94999988079071 0.949999988079071 0.949999988079071 1 0.949999988079071 1 1 1 0.949999988079071 1 0.94999988079071 0.949999988079071	17	0.949999988079071	0.580555558204651
0.94999988079071 0.949999988079071 1 0.949999988079071 1 1 1 1 0.949999988079071 1 0.949999988079071 0.949999988079071	28	0.949999988079071	0.580555558204651
0.94999988079071 1 0.949999988079071 0.949999988079071 1 1 1 0.949999988079071 0.949999988079071 0.949999988079071	33	0.949999988079071	0.395833313465118
1 0.94999988079071 0.949999988079071 1 1 1 0.94999988079071 0.94999988079071	147	0.949999988079071	0.316666662693024
0.94999988079071 0.949999988079071 1 1 1 0.94999988079071 0.94999988079071 1 0.94999988079071	291	1	1
0.94999988079071 0.94999988079071 1 1 0.94999988079071 0.94999988079071	303	0.949999988079071	0.107142858207226
0.94999988079071 1 1 0.94999988079071 0.94999988079071	304	0.949999988079071	0.395833313465118
1 1 0.94999988079071 0.94999988079071 1	358	0.949999988079071	0.527777791023254
1 0.94999988079071 0.94999988079071 0.94999988079071	372	1	0.289473682641983
0.94999988079071 0.949999988079071 0.949999988079071	373	1	0.289473682641983
0.94999988079071 0.949999988079071 0.949999988079071	375	1	0.289473682641983
0.94999988079071	395	0.949999988079071	0.882142841815948
0.94999988079071	398	0.949999988079071	0.316666662693024
	399	0.949999988079071	0.316666662693024
	407	1	0.474999994039536

FIG. 19

PKEY	NAME_FIRST	NAME_MIDDLE NAME_LAST	NAME_LAST
850551	LORRAINE	A	RIDGLEY
850554	LORRAINE		RIDGLEY
850558	LORRAINE	A	RIDGLEY
850559	JERQALD		RIDGLEY
875808	DEBBY		RIDGLEY
901407	JAMES		RIDGLEY
901415	JAMES	丑	RIDGLEY
901417	JAMES	E	RIDGLEY
1704	BEATRICE		RILEY
4171	GEORGE	M	RILEY
8653	ARETHA	T	RILEY
8659	LYTANYA	A	RILEY
13438	VICTORIA		RILEY
13440	ROBERT		RILEY
20982	JIMMIE	M	RILEY

FIG. 20

0.519531242549419

627

OVERALL

PKEY

0.593749992549419

1131

0.34375

641

0.962499991059303

1242

1480

0.281702294945717

0.257499999832362

1674

0.330624997615814

1792

1885

0.257499999832362

0.445652171969414

2895

3283

3303

0.516071416437626

0.519531242549419

3538

3713

0.663281261920929

0.407894738018513

3731

0.257499999832362

0.783750012516975

3869

3782

0.606249995529652

4007

0.606249995529652

PKEY	OVERALL
627	0.564062491059303
641	0.5625
1131	0.712499991059303
1242	0.974999994039536
1480	0.405509859323502
1674	0.50499999888241
1792	0.473749995231628
1885	0.50499999888241
2895	0.630434781312943
3283	0.615476176142693
3303	0.737499997019768
3538	0.564062491059303
3713	0.659895837306976
3731	0.605263158679008
3782	0.50499999888241
3869	0.712500005960464
4007	0.737499997019768
	The state of the s

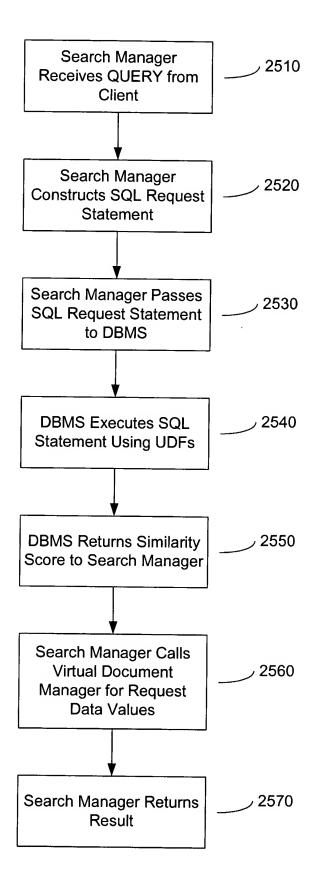
PKEY	2	3	4	v	9
8	0.125	0.159999996423721	0.239130437374115	0.009999999776492	0.534375011920929
6	0	0	0	0	0
10	0.300000011920929	0.181818187236786	0.316666662693024	0.474999994039536	0.237499997019768
111	0.240740746259689	0.009999999776492	0.237499997019768	0.474999994039536	0.522499978542328
12	0.240740746259689	0.009999999776492	0.237499997019768	0.474999994039536	0.522499978542328
13	0.240740746259689	0.009999999776492	0.237499997019768	0.474999994039536	0.522499978542328
14	0.395833313465118	0.009999999776492	0.395833313465118	0.3562499880790071	0.316666662693024
15	0.240740746259689	0.009999999776492	0.237499997019768	0.474999994039536	0.522499978542328
16	0	0	0	0	0
17	0.240740746259689	0.009999999776492	0.237499997019768	0.474999994039536	0.522499978542328
18	0.009999999776492	0.009999999776492	0.316666662693024	0.474999994039536	0.237499997019768
102919	0	0	0	0	0
19	0.150000005960464	0.009999999776492	0.316666662693024	0.474999994039536	0.237499997019768
20	0.240740746259689	0.009999999776492	0.237499997019768	0.474999994039536	0.522499978542328
21	0	0	0	0	0
22	0	0	0	0	0

FIG. 23

"Hoethod" "looks like" String diff()	"MEASURE"	DESCRIPTION
"looks like" // string diff() "spelled like" // CompareEditDistance() "sounds like" // CompareSoundex() "sexett" // CompareExact() "near" // CompareDigitStrings() "date" // CompareDugitStrings() "date" // CompareDate() "date" // CompareDate() "date" // CompareDate() "compareDate() "compareDate() "compareDate() "compareDate() "name" // CompareDate() "compareDate() "name" // CompareDate() "compareDate() "compare		DESCRIPTION
## string diff() "spelled like" ## CompareEditDistance() ## Sounds like" ## CompareSoundex() ## CompareSoundex() ## Exact, but case-sensitive comparison with boolean-style return. ## CompareDigitStrings() ## CompareDigitStrings() ## CompareDigitStrings() ## CompareDigitStrings() ## A smart, lexical comparison of strings known to contain digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain all digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain all digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain all digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain all digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain all digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain all digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain all digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain digits, which comparison of strings known to contain digits, dreating and season value. ## Provides a tokenized comparison for U.S. states. Check		A strongly left to right hissed governed at in a survey in C.
"spelled_like" // CompareEditDistance() // CompareSoundex() // CompareSoundex() // CompareExact() // CompareDigitStrings() // CompareDigitStrings() // CompareDigitStrings() // CompareNumeric() // CompareDate() // Compa		that returns a score of from 0.0 to 1.0
// CompareEditDistance() 'sounds like' // CompareSoundex() 'sexact'' // CompareExact() 'hear'' // CompareDigitStrings() 'hear'' // CompareNumeric() 'hear'' // CompareDigitStrings() 'hear'' // CompareNumeric() 'hear'' // CompareDate() 'hear 'hear'' // CompareDate() 'hear'' Provides a "proximity" comparison of dates that returns a score of from 0.0 to 1.0. 'hear 'hea		
"sounds_like" // CompareSoundex() "exact" // CompareExact() "near" // CompareDigitStrings() "numeric" // CompareNumeric() "date" // CompareDate() "time" // CompareTime() "name" // CompareNames() "rounder if lephone" // ComparePhoneNumbers() "state" // CompareStates() "street_address" // CompareStreetAddress() "street_address" // CompareEmail() "wrl" // CompareDate() "cemail" // CompareDate() "provides a tokenized comparison specifically for street addresses. Name weighted most heavily, then number, apartment, type. "rovides tokenized comparison specifically for personal names. Provides a smart comparison for U.S. states. Checks standard state abbreviations and maps them to their full name. "street_address" // CompareStreetAddress() "rompareDate() "vemail" // CompareURL() "provides a tokenized comparison specifically for rereal addresses. Name weighted most heavily, then extra, domain, high domain. "vurl" // CompareURL() "provides a tokenized comparison specifically for IPR addresses. Name weighted most heavily, then extra, high domain, www. Provides a tokenized comparison for Vehicle ID Numbers. "rounder a tokenized comparison for Vehicle ID Numbers. "rowlies a simple comparison for Federal ID Numbers. "rowlies a simple comparison for Credit Card Numbers.		of from 0.0 to 1.0
## CompareSoundex() ## Spelling. ## Exact, but case-sensitive comparison with boolean-style return. ## CompareExact() ## Exact, but case-sensitive comparison with boolean-style return. ## CompareDigitStrings() ## CompareDigitStrings() ## A smart, lexical comparison of strings known to contain digits, which compensates for typographical errors by using weighting. ## A numeric comparison of strings known to contain all digits, returning a fractional score value. ## Provides a "proximity comparison of dates that returns a score of from 0.0 to 1.0. ## Provides a "proximity" comparison for times for a range of interest of less than two hours. ## Provides a tokenized comparison specifically for personal names. ## Last name is weighted most heavily, then first, then middle. ## Provides a tokenized comparison specifically for telephone numbers. ## Area code and exchange are weighted most heavily. ## Provides a tokenized comparison for U.S. states. Checks standard state abbreviations and maps them to their full name. ## Street address" ## CompareStreetAddress() ## Provides a tokenized comparison specifically for street addresses. ## Street name weighted most heavily, then number, apartment, type. ## Provides a tokenized comparison specifically for email addresses. ## Name weighted most heavily, then extra, domain, high domain. ## Provides a tokenized comparison specifically for IP addresses. ## Domain weighted most heavily, then extra, high domain. ## Provides a tokenized comparison specifically for IP addresses. ## Domain weighted most heavily, then extra, high domain. ## Provides a tokenized comparison for Vehicle ID Numbers. ## Provides a simple comparison for Vehicle Tags. ## Provides a simple comparison for Federal ID Numbers. ## Provides a simple comparison for Credit Card Numbers.		
"exact" "CompareExact() "near" A smart, lexical comparison of strings known to contain digits, which compensates for typographical errors by using weighting. "numeric" "A numeric comparison of strings known to contain all digits, returning a fractional score value. "date" "CompareDate() "time" "CompareTime() "name" "CompareNames() "clephone" "Frovides a "proximity" comparison for times for a range of interest of less than two hours. "rame" "ComparePhoneNumbers() "state" "CompareStates() "state" "CompareStates() "street_address" "CompareEmail() "email" "Provides a tokenized comparison specifically for telephone numbers. Area code and exchange are weighted most heavily. "street_address" "CompareEmail() "email" "Provides a tokenized comparison specifically for street addresses. "Street name weighted most heavily, then number, apartment, type. "email" "Provides a tokenized comparison specifically for street addresses. "Street name weighted most heavily, then number, apartment, type. "email" "Provides a tokenized comparison specifically for street addresses. "CompareEmail() "ompareURL() "ompareURL() "vin" "Provides a tokenized comparison specifically for grant addresses. Domain weighted most heavily, then extra, domain, high domain. "rovides a tokenized comparison specifically for IP addresses. Domain weighted most heavily, then extra, high domain. "rovides a tokenized comparison specifically for IP addresses. Domain weighted most heavily, then extra, high domain, www. "rovides a tokenized comparison specifically for IP addresses. Frovides a tokenized comparison for Vehicle ID Numbers. "rovides a simple comparison for Vehicle Tags. "rovides a simple comparison for Federal ID Numbers. "rovides a simple comparison for Credit Card Numbers.		spalling
### CompareExact() "near" A smart, lexical comparison of strings known to contain digits, which compensates for typographical errors by using weighting. A numeric comparison of strings known to contain all digits, returning a fractional score value. "date" ### CompareDate() ### CompareDate() #### Provides a "proximity comparison of dates that returns a score of from 0.0 to 1.0. #### Provides a "proximity" comparison for times for a range of interest of less than two hours. #### Provides a tokenized comparison specifically for personal names. #### Last name is weighted most heavily, then first, then middle. ###################################		
"near" A smart, lexical comparison of strings known to contain digits, which compensates for typographical errors by using weighting. "numeric" A numeric comparison of strings known to contain all digits, returning a fractional score value. "date" Provides a "proximity comparison of dates that returns a score of from 0.0 to 1.0. "time" Provides a "proximity" comparison for times for a range of interest of less than two hours. "name" Provides a tokenized comparison specifically for personal names. "CompareNames() Last name is weighted most heavily, then first, then middle. "telephone" Provides a tokenized comparison specifically for telephone numbers. Area code and exchange are weighted most heavily. "state" Provides a tokenized comparison specifically for street addresses. "CompareStates() Provides a tokenized comparison specifically for street addresses. "CompareStreetAddress() Street name weighted most heavily, then number, apartment, type. "email" Provides tokenized comparison specifically for email addresses. Name weighted most heavily, then extra, domain, high domain. "url" Provides a tokenized comparison specifically for URL addresses. Name weighted most heavily, then extra, high domain, www. "ip_address" Provides a tokenized comparison specifically for URL addresses. Domain weighted most heavily, then extra, high domain, www. "ip_address" Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group2, group3, group4. "vin" Provides a tokenized comparison for Vehicle Tags. "compareVhicle_tag" Provides a simple comparison for Federal ID Numbers. "federal_id_number" Provides a simple comparison for Credit Card Numbers.		Exact, but case-sensitive comparison with boolean-style return.
## CompareDigitStrings() "numeric" ## A numeric comparison of strings known to contain all digits, ## CompareNumeric() "date" ## Provides a "proximity comparison of dates that returns a score of ## from 0.0 to 1.0. "time" ## Provides a "proximity" comparison of times for a range of interest ## of less than two hours. "provides a tokenized comparison specifically for personal names. ## Last name is weighted most heavily, then first, then middle. "telephone" ## Provides a tokenized comparison specifically for telephone numbers. ## Area code and exchange are weighted most heavily. "state" ## Provides a tokenized comparison for U.S. states. Checks standard state ## abbreviations and maps them to their full name. "street address" ## CompareStreetAddress() "compareEmail() "compareEmail() "url" ## Provides a tokenized comparison specifically for street addresses. ## CompareURL() ## Drovides a tokenized comparison specifically for email addresses. ## Drovides a tokenized comparison specifically for ural addresses. ## Provides a tokenized comparison specifically for URL addresses. ## Provides a tokenized comparison specifically for IP addresses. ## Domain weighted most heavily, then extra, high domain, www. ## Provides a tokenized comparison specifically for IP addresses. ## OmpareURL() ## OmpareVelot() ## Provides a tokenized comparison for Vehicle ID Numbers. ## OmpareVeloteTag() ## Provides a simple comparison for Federal ID Numbers. ## Provides_a simple comparison for Credit Card Numbers. ## Provides_a simple comparison for Credit Card Numbers.		A smart laying comparison of strings language to a set 11.14
"numeric" // CompareNumeric() A numeric comparison of strings known to contain all digits, returning a fractional score value. Provides a "proximity comparison of dates that returns a score of from 0.0 to 1.0. Provides a "proximity" comparison for times for a range of interest of less than two hours. Provides a tokenized comparison specifically for personal names. Last name is weighted most heavily, then first, then middle. "telephone" // ComparePhoneNumbers() "state" Provides a tokenized comparison specifically for telephone numbers. Area code and exchange are weighted most heavily. Provides a smart comparison for U.S. states. Checks standard state abbreviations and maps them to their full name. "street address" // CompareStreetAddress() "email" Provides a tokenized comparison specifically for street addresses. Street name weighted most heavily, then number, apartment, type. "email" Provides tokenized comparison specifically for email addresses. Name weighted most heavily, then extra, domain, high domain. "url" Provides a tokenized comparison specifically for URL addresses. Domain weighted most heavily, then extra, high domain, www. "ip_address" // CompareURL() "oromareUredicy "rovides a tokenized comparison for Vehicle ID Numbers. "rovides a simple comparison for Vehicle Tags. Provides a simple comparison for Federal ID Numbers. "federal_id_number" // CompareFIN() "redeit_card" Provides a simple comparison for Credit Card Numbers.		which compensates for typographical arrang by using a world to
### CompareNumeric() "date" ### Provides a "proximity comparison of dates that returns a score of from 0.0 to 1.0. #### Provides a "proximity" comparison for times for a range of interest of less than two hours. ###################################		A numeric compensates for typographical errors by using weighting.
"date" // CompareDate() "time" // CompareTime() "time" // CompareTime() "name" // CompareNames() "telephone" // ComparePhoneNumbers() "state" // CompareStates() "street_address" // CompareEmail() "email" // CompareEmail() "win" Provides a tokenized comparison specifically for personal names. Last name is weighted most heavily, then first, then middle. Provides a tokenized comparison specifically for telephone numbers. Area code and exchange are weighted most heavily. Provides a smart comparison for U.S. states. Checks standard state abbreviations and maps them to their full name. "street_address" // CompareStreetAddress() "compareEmail() "url" Provides a tokenized comparison specifically for street addresses. Street name weighted most heavily, then number, apartment, type. Provides tokenized comparison specifically for email addresses. Name weighted most heavily, then extra, domain, high domain. "url" Provides a tokenized comparison specifically for URL addresses. // CompareURL() Domain weighted most heavily, then extra, high domain, www. "ip_address" // CompareDottedIP() "vin" Provides a tokenized comparison specifically for IP addresses. Group1 weighted most heavily, then group2, group3, group4. "vin" Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group1, group2, group3. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.		returning a fractional score value
// CompareDate() from 0.0 to 1.0. "time"		Provides a "provimity comparison of 1-4-41 at a 4
"ttime" // CompareTime() "name" // CompareNames() "telephone" // ComparePhoneNumbers() "state" // CompareStates() "street_address" // CompareEmail() "email" // CompareEmail() "remail" // CompareURL() "provides a tokenized comparison specifically for personal names. Last name is weighted most heavily, then first, then middle. Provides a tokenized comparison specifically for telephone numbers. Area code and exchange are weighted most heavily. Provides a smart comparison for U.S. states. Checks standard state abbreviations and maps them to their full name. Provides a tokenized comparison specifically for street addresses. Street name weighted most heavily, then number, apartment, type. Provides a tokenized comparison specifically for email addresses. Name weighted most heavily, then extra, domain, high domain. "url" Provides a tokenized comparison specifically for URL addresses. // CompareURL() Domain weighted most heavily, then extra, high domain, www. "ip_address" Provides a tokenized comparison specifically for IP addresses. // CompareDottedIP() "vin" Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group2, group3, group4. "vehicle_tag" // CompareVehicleTag() "federal_id number" // CompareFIN() "rederal_id number" Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.		from 0.0 to 1.0
## CompareTime() "name" ## CompareNames() ## CompareNames() ## CompareNames() ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## CompareStates() ## CompareStates() ## CompareStates() ## CompareStates() ## CompareStreetAddress() ## CompareStreetAddress() ## CompareStreetAddress() ## ComparePhoneNumbers() ## Provides a tokenized comparison for U.S. states. Checks standard state abbreviations and maps them to their full name. ## Provides a tokenized comparison specifically for street addresses. ## CompareStreetAddress() ## Provides a tokenized comparison specifically for email addresses. ## Provides tokenized comparison specifically for email addresses. ## Provides a tokenized comparison specifically for URL addresses. ## Domain weighted most heavily, then extra, domain, high domain. ## Provides a tokenized comparison specifically for URL addresses. ## Domain weighted most heavily, then extra, high domain, www. ## Provides a tokenized comparison specifically for IP addresses. ## GompareDottedIP() ## CompareVIN() ## Provides a tokenized comparison for Vehicle ID Numbers. Group4 ## weighted most heavily, then group1, group2, group3. ## Provides a simple comparison for Vehicle Tags. ## Provides a simple comparison for Federal ID Numbers. ## Provides a simple comparison for Credit Card Numbers.		
"name" CompareNames()		
## CompareNames() "telephone" ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## ComparePhoneNumbers() ## CompareStates() ## CompareStates() ## CompareStreetAddress() ## CompareStreetAddress() ## CompareStreetAddress() ## CompareStreetAddress() ## CompareEmail() ## Provides a tokenized comparison specifically for street addresses. ## CompareEmail() ## CompareURL() ## CompareURL() ## CompareDottedIP() ## CompareVIN() ## CompareVIN() ## CompareVin() ## CompareVehicle_Tag() ## CompareFIN() ## CompareFIN() ## Provides a tokenized comparison for Vehicle Tags. ## Provides a simple comparison for Credit Card Numbers. ## Provides a simple comparison for Credit Card Numbers. ## Provides a simple comparison for Credit Card Numbers. ## Provides a simple comparison for Credit Card Numbers.		
"telephone" // ComparePhoneNumbers() "state" // CompareStates() "street_address" // CompareEmail() "compareEmail() "url" // CompareURL() "ip_address" // CompareDottedIP() "ip_address" // CompareDottedIP() "vin" // CompareVin() "vehicle_tag" // CompareVehicle_Tag() "federal_id_number" // CompareFin() "credit_card" Provides a tokenized comparison specifically for street addresses. Provides a tokenized comparison specifically for email addresses. Street name weighted most heavily, then number, apartment, type. Provides tokenized comparison specifically for email addresses. Name weighted most heavily, then extra, domain, high domain. Provides a tokenized comparison specifically for URL addresses. Domain weighted most heavily, then extra, high domain, www. Provides a tokenized comparison specifically for IP addresses. Group1 weighted most heavily, then group2, group3, group4. Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group1, group2, group3. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.		I ast name is weighted most heavily than first than middle
## ComparePhoneNumbers() ## Area code and exchange are weighted most heavily. ## Provides a smart comparison for U.S. states. Checks standard state abbreviations and maps them to their full name. ## Provides a tokenized comparison specifically for street addresses. ## CompareStreetAddress() ## Provides a tokenized comparison specifically for email addresses. ## CompareEmail() ## Provides a tokenized comparison specifically for URL addresses. ## CompareURL() ## Provides a tokenized comparison specifically for URL addresses. ## Domain weighted most heavily, then extra, high domain, www. ## Provides a tokenized comparison specifically for IP addresses. ## CompareDottedIP() ## Provides a tokenized comparison for Vehicle ID Numbers. ## Group1 weighted most heavily, then group2, group3, group4. ## Weighted most heavily, then group1, group2, group3. ## Provides a simple comparison for Vehicle Tags. ## Provides a simple comparison for Federal ID Numbers. ## Provides a simple comparison for Credit Card Numbers. ## Provides a simple comparison for Credit Card Numbers.		Provides a tokenized comparison specifically for talendary
"state" // CompareStates() "street_address" // CompareStreetAddress() "email" // CompareEmail() "url" // CompareURL() "ip_address" // CompareDottedIP() "vin" // CompareVIN() "compareVIN() "federal_id_number" // CompareFIN() "credit_card" Provides a smart comparison for U.S. states. Checks standard state abbreviations and maps them to their full name. Provides a tokenized comparison specifically for street addresses. Street name weighted most heavily, then number, apartment, type. Provides tokenized comparison specifically for email addresses. Name weighted most heavily, then extra, domain, high domain. Provides a tokenized comparison specifically for URL addresses. Domain weighted most heavily, then extra, high domain, www. Provides a tokenized comparison specifically for IP addresses. Group1 weighted most heavily, then group2, group3, group4. Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group1, group2, group3. Provides a simple comparison for Vehicle Tags. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.	_	Area code and exchange are weighted most beguits.
### CompareStates() ### abbreviations and maps them to their full name. ### abbreviations and maps them to their full name. ### Provides a tokenized comparison specifically for street addresses. ### CompareStreetAddress() ### Provides a tokenized comparison specifically for email addresses. ### Provides tokenized comparison specifically for email addresses. ### Name weighted most heavily, then extra, domain, high domain. #### Provides a tokenized comparison specifically for URL addresses. ######## Domain weighted most heavily, then extra, high domain, www. #################################		Provides a smart comparison for I.I.S. states. Charles at a last terms.
"street_address" // CompareStreetAddress() "email" // CompareEmail() "url" // CompareURL() "ip_address" // CompareDottedIP() "vin" // CompareVIN() "vehicle_tag" // CompareVehicleTag() "federal_id_number" // CompareFIN() Provides a tokenized comparison specifically for email addresses. Name weighted most heavily, then extra, domain, high domain. Provides a tokenized comparison specifically for URL addresses. Domain weighted most heavily, then extra, high domain, www. Provides a tokenized comparison specifically for IP addresses. Group1 weighted most heavily, then group2, group3, group4. Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group1, group2, group3. Provides a simple comparison for Vehicle Tags. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.		ahbreviations and mans them to their full name
### CompareStreetAddress() Street name weighted most heavily, then number, apartment, type. ###################################		Provides a tokenized comparison anaifically for street address.
"email" // CompareEmail() Provides tokenized comparison specifically for email addresses. Name weighted most heavily, then extra, domain, high domain. Provides a tokenized comparison specifically for URL addresses. Domain weighted most heavily, then extra, high domain, www. Provides a tokenized comparison specifically for IP addresses. Frovides a tokenized comparison specifically for IP addresses. Group1 weighted most heavily, then group2, group3, group4. Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group1, group2, group3. Provides a simple comparison for Vehicle Tags. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.		Street name weighted most heavily then number anorthean terms
// CompareEmail() Name weighted most heavily, then extra, domain, high domain. Provides a tokenized comparison specifically for URL addresses. Domain weighted most heavily, then extra, high domain, www. Provides a tokenized comparison specifically for IP addresses. CompareDottedIP() Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group2, group3, group4. Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group1, group2, group3. Provides a simple comparison for Vehicle Tags. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Federal ID Numbers.		Provides tokenized comparison specifically for amail addresses
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// CompareURL() Domain weighted most heavily, then extra, high domain, www. Provides a tokenized comparison specifically for IP addresses. Group1 weighted most heavily, then group2, group3, group4. Provides a tokenized comparison for Vehicle ID Numbers. Group4 Weighted most heavily, then group1, group2, group3. Provides a simple comparison for Vehicle Tags. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.		Provides a tokenized comparison specifically for LIPL addresses
Provides a tokenized comparison specifically for IP addresses. Group1 weighted most heavily, then group2, group3, group4. Provides a tokenized comparison for Vehicle ID Numbers. Group4 Weighted most heavily, then group1, group2, group3. Provides a simple comparison for Vehicle Tags. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.	!	Domain weighted most heavily then extra high domain yayay
// CompareDottedIP() Group1 weighted most heavily, then group2, group3, group4. Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group1, group2, group3. Provides a simple comparison for Vehicle Tags. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.		Provides a tokenized comparison specifically for IP addresses
"vin" // CompareVIN() Provides a tokenized comparison for Vehicle ID Numbers. Group4 weighted most heavily, then group1, group2, group3. Provides a simple comparison for Vehicle Tags. // CompareVehicleTag() Provides a simple comparison for Federal ID Numbers. // CompareFIN() Provides a simple comparison for Credit Card Numbers.	· - -	Group! weighted most heavily then group? group? group!
// CompareVIN() weighted most heavily, then group1, group2, group3. "vehicle_tag" Provides a simple comparison for Vehicle Tags. // CompareVehicleTag() Provides a simple comparison for Federal ID Numbers. // CompareFIN() Provides a simple comparison for Credit Card Numbers.		Provides a tokenized comparison for Vehicle ID Numbers Ground
"vehicle_tag" Provides a simple comparison for Vehicle Tags. "federal_id_number" Provides a simple comparison for Federal ID Numbers. "CompareFIN() Provides a simple comparison for Credit Card Numbers.	// CompareVIN()	weighted most heavily, then groun1 groun2 groun3
// CompareVehicleTag() "federal_id_number" // CompareFIN() "credit_card" Provides a simple comparison for Federal ID Numbers. Provides a simple comparison for Credit Card Numbers.		
"federal_id_number" Provides a simple comparison for Federal ID Numbers. // CompareFIN() "credit_card" Provides a simple comparison for Credit Card Numbers.		Tomparion for volucie rags.
// CompareFIN() "credit_card" Provides a simple comparison for Credit Card Numbers.		Provides a simple comparison for Federal ID Numbers
=	- -	re
I TOTAL STATE OF THE PROPERTY.	"credit_card"	Provides a simple comparison for Credit Card Numbers
// CompareCreditCard()	// CompareCreditCard()	
"drivers_license" Provides a simple comparison for Drivers License Numbers.	"drivers_license"	Provides a simple comparison for Drivers License Numbers
// CompareDLnumber()	// CompareDLnumber()	
"ssn" Provides a tokenized comparison for Social Security numbers.		Provides a tokenized comparison for Social Security numbers.
// CompareSSN()	// CompareSSN()	

"MEASURE"	DESCRIPTION
// METHOD	
"less_than"	Provides a boolean-type comparison for any two strings. The strings
// CompareLessThan()	may be compared numerically or lexically.
"less_than_equal"	Provides a boolean-type comparison for two strings. The strings may
// CompareLessThanEqual()	be compared numerically or lexically.
"greater_than"	Provides a boolean-type comparison for two strings. The strings may
// CompareGreaterThan()	be compared numerically or lexically.
"greater_than_equal"	Provides a boolean-type comparison for two strings. The strings may
// CompareGreaterThanEqual()	be compared numerically or lexically.
"metaphone"	Provides groupings of differently, yet correctly spelled names. May
// CompareMetaphone()	be used to provide phonetic comparisons.
"phonex"	Provides phonetic comparisons.
// ComparePhonex()	
"contains"	Provides a boolean-type test for sub-string inclusion.
// ContainsString()	
"starts_with"	Provides a boolean-type test for sub-string inclusion.
// BeginsWith()	
"ends_with"	Provides a boolean-type test for sub-string inclusion.
// EndsWith()	
"pattern"	Provides a boolean-type test for sub-string inclusion.
// ContainsPattern()	

FIG. 24B



2500

<DATASOURCE implementation="implementation" name="SecureDatasource"> <URL>url</URL> <USERNAME>user <PASSWORD> password</PASSWORD> <DRIVER>driver </DATASOURCE>

where: implementation is the object that implements the interface for this datasource

name

is a name for this instance of the datasource

url

is the universal resource locator consisting of these

elements

location of the datasource rdbname of the database

ssl enablement

ca_cert_fingerprint for the connection's client certificate

server_cert_fingerprint for the connection's client

certificate

user

is the username provided to the database for access by

the SSE

password

is the password associated with the username driver

is the selection of the protocol driver (SSL)

FIG. 26

<DATASOURCE implementation="com.infoglide.vdm.RelationalDatasource"</p> name="SecureDatasource">

<URL>jdbc:db2://localhost:30000;rdbname=LONGLIFE;ssl=yes;ca_cert_fingerpr int=fcb4a6098241

4b077297553d0aedd291;server_cert_fingerprint=48a26fc9218d32ce484fd80798 797b1cb</URL>

<USERNAME>db2admin</USERNAME>

<PASSWORD>!desodfk8</PASSWORD>

<DRIVER>hit.db2.Db2Driver

</DATASOURCE>

where *implementation* is the object that implements the interface for this driver path is the pathname of the filesystem node used for persistence

FIG. 28

where *implementation* is the object that implements the interface for this driver *driver* is the name of the driver for the persistence database

username is the username for access to the persistence database password is the password associated with the username

tablename is the password associated with the username is the database table to be used for persistence (This table must include PATH and VALUE columns)

FIG. 29

 $< PERSISTENCE implementation = "com.infoglide.persistence.drivers.FilesystemDriver" \\ < LOCATION > D: \playground \DEVL\SSE-DIST\persistence \p1 < / LOCATION > \\ < / PERSISTENCE >$

```
<PERSISTENCE implementation="com.infoglide.persistence.drivers.DBDriver" >
       <URL>jdbc:interbase://localhost/d:/playground/DEVL/PERSISTENCE</URL>
       <DRIVER>interbase.interclient.Driver
       <use><USERNAME>SYSDBA</username>
       <PASSWORD>masterkey</PASSWORD>
       <TABLE>IG_CONFIG</TABLE>
 </PERSISTENCE>
                          FIG. 31
<PERSISTENCE implementation="com.infoglide.persistence.drivers.CompositeDriver">
       <PERSISTENCE regex="/p1data/.*"
implementation="com.infoglide.persistence.drivers.FilesystemDriver">
               <LOCATION>D:\playground\DEVL\SSE-
             DIST\persistence\p1</LOCATION
      </PERSISTENCE>
      <PERSISTENCE regex="/p2data/.*"
      implementation="com.infoglide.persistence.drivers.FilesystemDriver">
               <LOCATION>D:\playground\DEVL\SSE-
             DIST\persistence\p2</LOCATION>
      </PERSISTENCE>
      <PERSISTENCE regex="/p3data/.*"
      implementation="com.infoglide.persistence.drivers.FilesystemDriver">
               <LOCATION>D:\playground\DEVL\SSE-
             DIST\persistence\p3</LOCATION>
      </PERSISTENCE>
</PERSISTENCE>
                          FIG. 32
<PERSISTENCE
implementation="com.infoglide.persistence.drivers.PathPrependingDriver"
path="/TESTS" >
      <PERSISTENCE implementation=
      "com.infoglide.persistence.drivers.FilesystemDriver">
             <LOCATION>D:\playground\DEVL\SSE-
      DIST\persistence\p1</LOCATION>
      </PERSISTENCE>
</PERSISTENCE>
```


FIG. 34

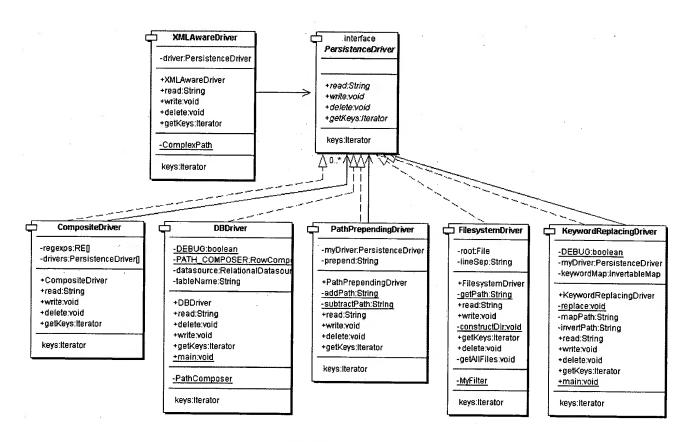


FIG. 35

Gateway.xml:

FIG. 36

Sse.xml:

```
<PERSISTENCE
implementation="com.infoglide.persistence.drivers.KeywordReplacingDriver">
    <KEYWORD key="MEASURE" value="measures"/>
    <KEYWORD key="CHOICE" value="choices"/>
    <KEYWORD key="PARSER" value="parsers"/>
    <KEYWORD key="DATASOURCE" value="datasources"/>
   <KEYWORD key="SCHEMA" value="schemas"/>
   <KEYWORD key="STATISTIC" value="statistics"/>
            <PERSISTENCE
implementation="com.infoglide.persistence.drivers.DBDriver" >
                   <URL>jdbc:db2:PERSIST</URL>
                   <DRIVER>COM.ibm.db2.jdbc.app.DB2Driver</DRIVER>
                   <USERNAME>administrator</USERNAME>
                   <PASSWORD></PASSWORD>
                   <TABLE>IG CONFIGURE</TABLE>
            </PERSISTENCE>
      </PERSISTENCE>
```

Vdm.xml: